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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,809	06/27/2003	Gregory M. Dobbs	210-609 INT	7558
20874	7590	12/08/2004	EXAMINER	
WALL MARJAMA & BILINSKI 101 SOUTH SALINA STREET SUITE 400 SYRACUSE, NY 13202			SPITZER, ROBERT H	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/608,809

Applicant(s)

DOBBS ET AL.

Examiner

Robert H. Spitzer

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 37-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 37-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1724.
2. On the drawing figures, the specification has no description of numeral "44" on Fig. 15.
3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 38,39,42,43,46 and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. All of these claims are indefinite because the instant specification does not contain any support for these limitations, as there is no specific mention of the either the hydrocarbon copolymer comprising "at least one arylvinyl monomer" or that such monomer "is at least partially sulfonated". While applicants may be using a material which has those properties, the instant specification must include the exact language, if it is supported thereby, that is included in these claims.
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
6. Claims 37,40,41,44,45 and 48 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by both the process of use and apparatus of Yamada et al.

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(4,449,992), wherein heat and moisture are transferred between outside air and room air using a heat/water vapor conducting membrane made from at least partially sulfonated random hydrocarbon copolymers. See col. 5, line 9 through col. 7, line 52 and Example 4.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 38,39,42,43,46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. (4,449,992) in view of Fukui et al. (5,620,500). The claims differ from the disclosure of Yamada et al. ('992) in the membrane including at least one partially sulfonated arylvinyl monomer. Fukui et al. ('500) show a membrane which includes at least partially sulfonated random hydrocarbon copolymers with at least one partially sulfonated arylvinyl monomer, at col. 2, line 32 through col. 3, line 28. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize a membrane which includes at least partially sulfonated arylvinyl monomer in the process and apparatus of Yamada et al. ('992), in view of the showing of Fukui et al. ('500), as the membrane has utility for the transport of water vapor.

9. The remaining references listed on the PTO-892 show art of interest, many of which show the use of NAFION brand membranes for the transport of water vapor therethrough.

10. As to the request for an interference, the same is not applicable at this time because of the above indefinitiveness and prior art rejections of the instant claims. Until such claims are in condition for allowance, no interference can be set up. The examiner is puzzled, however, because it appears that the purchased DIAS membrane which applicants are using is probably the same membrane as used in the Wnek et al. (6,413,298) reference. Thus, applicants are required to provide the examiner with any product information which they may have for that DIAS membrane.

11. Applicants response to this Office action should also include the following editorial changes: para. [0012], lines 3 and 5, "perfluoronated" should be "perfluorinated"; para. [0013], lines 2,10 and 13, "perfluoronated" should be "perfluorinated"; para. [0035], line 2, "polytetrafuroeethylene" should be "polytetrafluoroethylene"; para. [0036], line 2, "polytetrafluroeethylene" should be "polytetrafluoroethylene"; para. [0040], lines 10,11,20 and 22, "perfluoronated" should be "perfluorinated"; para. [0041], line 16, "perfluoronated" should be "perfluorinated"; para. [0042], line 2, "perfluoronated" should be "perfluorinated"; para. [0042], line 4, "the" should be deleted; para. [0045], line 16, "of two" should be "two"; para. [0048], line 4, "12c" should be "12b"; para. [0050], line 17, "Fig." should be "Figs."; para. [0053], lines 20 and 24, "Fig." should be "Figs."; para. [0054], lines 2 and 3, "Fig." should be "Figs."; para. [0056], line 5, "polytetrafluroeethylene" should be "polytetrafluoroethylene"; and, para. [0057], line 16, "Fig." should be "Figs.".

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Spitzer whose telephone number is (571)

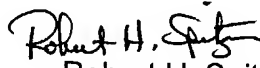
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272-1167. The examiner can normally be reached on Monday-Thursday from (5:30AM-4:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 7, 2004

  
Robert H. Spitzer  
Primary Examiner  
Art Unit 1724

December 7, 2004